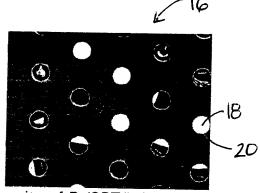


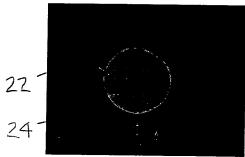
(a) Integrity of Pt/SBT/Ir-Ta-O capacitor with Al_2O_3 layer (325 Å, oxidation annealed at 500°C for 30min, forming gas annealed at 400°C for 5min)

FIG. I (PRIOR ART)



(b) Integrity of Pt/SBT/Ir-Ta-O capacitor with TiO₂ passivation layer (800Å, oxygen annealing at 500°C for 30 min.

FIG. Z (PRIOR ART)

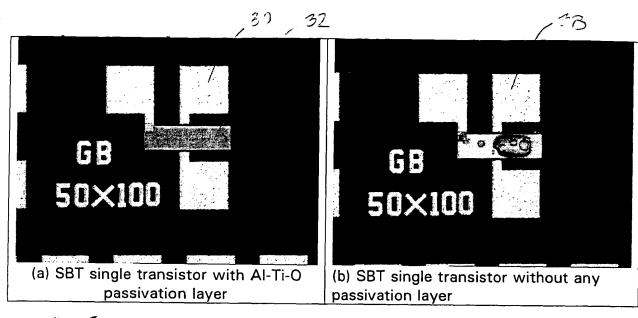


(c) Integrity of Pt/SBT/Ir-Ta-O capacitor with Al-Ti-O 226 Å, O2 annealed at 500°C for 30min, Forming gas annealed at 400°C for 5min

(d) heteresis loop of Pt/SBT/Ir-Ta-O capacitor with Al-Ti-O (oxidation annealed at 500°C) before and after forming gas annealing at 400°C for 5min

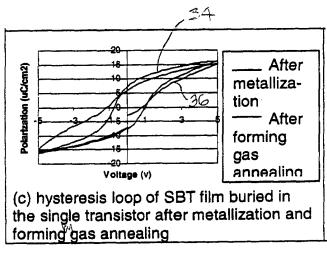
FIG. 4

FIG 3



F16.5

F16. 7



F16.6

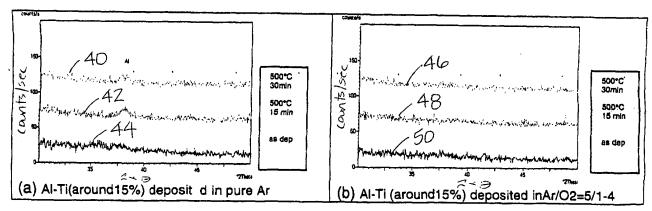


FIG. 8

FIG. 9

Provide Al and Ti taracts / 60 10W to 800W, Power ratio of 10:1 to 3:1 Sputter Al and Ti tarcie's 62 in Ar, 30s to 10 min with shutter closed Provide Argon Dxygen ratio of 10/1 to 10/10 Open shutter on targets, sputter targets for 10s to 5 min Provide Argon/Oxygen ratio of 1018 to 10720 with power on shutter open Provide Argon Dxygen ratio of 10/1 to 10/10, close Shutter then Dxygen source Sputtering Ti and Al targets, in Argon for 30s to 10 min Determine: Thickness satisfactory? NO YES Anneal Passivation layer at 400 to 800°C for 10's to 1 hr. in Oxygen atmosphere